Hubbell™

MODEL J

Electric Booster Heater

For Use In Commercial Kitchens And Restaurants To Supply 180°F Sanitizing Rinse Water

FEATURES

- **Heavy Duty Construction**
  - √ All stainless steel tank construction does not require an internal lining
  - √ ASME Section VIII stamped construction provides for extended tank life
  - √ Exterior surfaces including the jacket, base and front cover are all brushed stainless steel for improved appearance and longevity
- **Advanced Design**
  - √ Advanced electronic temperature control with digital display confirms at a glance proper operation and temperature setting
  - √ Visual indication of exact set point temperature as well as fault conditions provides instant feedback
  - √ Electronic leak detection system notifies user in the event of an internal water leak
  - √ Factory packaged resettable circuit breakers for internal over current protection save time and money compared to one shot fuses
  - √ A bronze body (not cast iron) pressure reducing valve is factory supplied with each booster.
  - √ Designed for ease of service, no electrical component needs to be removed to replace any other part
  - √ Screw plug elements with O-ring gasket reduce leakage problems associated with less reliable and more difficult to service flange type heating elements.
- **Reliable**
  - √ Overall dimensions and connection locations are compatible with other popular brands to facilitate direct replacement without modification to the existing plumbing.
  - √ Environmentally friendly CFC/HCFC free closed cell foam insulation minimizes tank heat loss for maximum operating efficiency and reduced operating costs
  - √ Full ten (10) year (non pro-rated) tank warranty

Model J

c UL us LISTED

UL LISTED EPH ANSI/NSF 5

ASME UM

ISO 9001:2008

A Long Lasting Booster Heater

The Hubbell J Model is the longest lasting booster heater available because it utilizes a heavy duty ASME Section VIII designed, constructed and stamped all stainless steel tank which does not require an internal tank lining. Other manufacturers use a non ASME steel tank with an internal lining which is easily eroded in high temperature water and eventually leaves the bare steel tank exposed to the corrosive effects of water. Once this occurs it is only a short time before a steel tank will begin to rust, leak, and need replacement. Hubbell did not stop at improving just the tank design. For improved appearance and longevity the Hubbell booster comes standard with a brushed stainless steel outer jacket and base which is impervious to the corrosive effects of water and looks great in your kitchen. The Hubbell booster is also equipped as standard with the advanced functionality of an electronic temperature controller to provide accurate, reliable and energy efficient operation while simplifying service work. The Hubbell booster's closed cell foam insulation also improves operating efficiency and reduces the cost of operation. When you specify and install a Hubbell booster heater, you will have confidence in knowing that the owner will be provided with a long lasting and trouble-free source for 180°F water.

Why Install A Hubbell Booster Water Heater?

1 **Improved Longevity**

The Hubbell booster heater is designed to provide many years of operation. The tank is all stainless steel construction and is designed, constructed and stamped in strict conformance to ASME Section VIII.

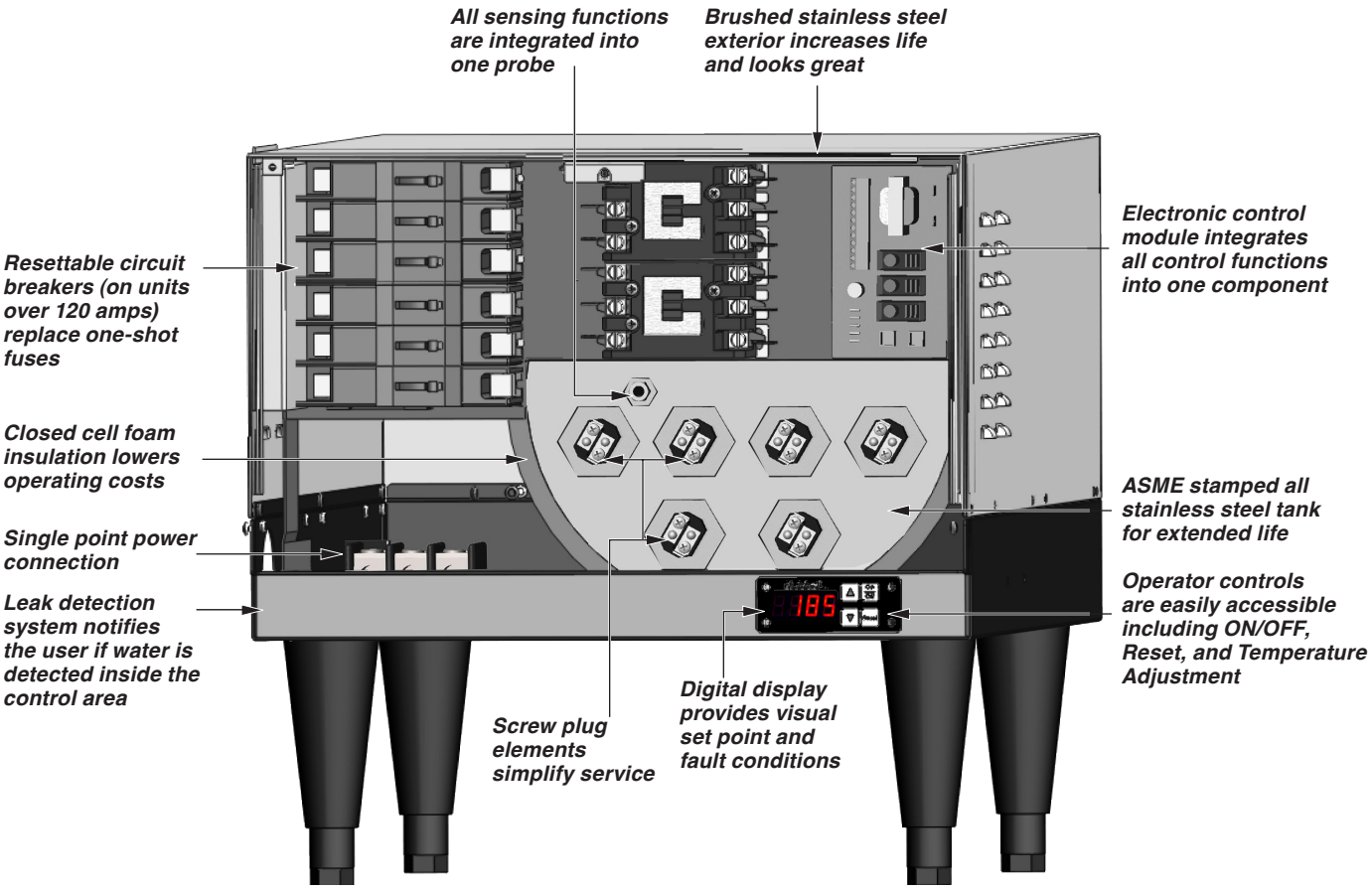
2 **Lower Operating Costs**

The Hubbell booster tank is encapsulated in environmentally friendly CFC/HCFC free closed cell foam insulation to minimize stand-by heat loss. This high quality insulation reduces heat loss compared to fiberglass type insulation found in other brands. The result is that an average Hubbell booster heater owner can expect to save over 1,400 KW/Hrs compared to other brands.

3 **Reduced Service and Maintenance Costs**

Hubbell has greatly simplified booster heater service and maintenance through numerous advancements in booster design and controls. The Hubbell controller is a major step forward with improved ease of use and service. The digital display provides the owner and technician with an exact set point temperature as well as visual error indication. Because the controller can be set to the exact desired temperature in degrees – there is no more hotter/colder calibration. It also includes a leak detection system to notify the user in the event of an internal leak. For further ease of service and maintenance, all controls are mounted such that when a component is removed for service no other component needs to be removed, and all sensing functions have been consolidated into one probe, which can be replaced without draining the tank. The heating element and sensing probe are straight thread screw types that utilize an O-ring to minimize leakage problems as is common with flat gaskets and NPT connections.

Model J6 Shown


All sensing functions are integrated into one probe
Brushed stainless steel exterior increases life and looks great
Resettable circuit breakers (on units over 120 amps) replace one-shot fuses
Closed cell foam insulation lowers operating costs
Single point power connection
Leak detection system notifies the user if water is detected inside the control area
Electronic control module integrates all control functions into one component
ASME stamped all stainless steel tank for extended life
Operator controls are easily accessible including ON/OFF, Reset, and Temperature Adjustment
Screw plug elements simplify service
Digital display provides visual set point and fault conditions
185

Note: All components are removable without disturbing any other component

Model Number Selection Chart With Amperage

Base Model	KW Rating	Storage Capacity	Full Model Number Listed by Voltage and Phase								Amperage Draw by Voltage and Phase						
			120 V	208 V		240 V		480 V	480 V	600 V	120 V	208 V		240 V		480 V	600 V
			1 Φ	1 Φ	3 Φ	1 Φ	3 Φ	3 Φ	1 Φ	3 Φ	1 Φ	1 Φ	3 Φ	1 Φ	3 Φ	3 Φ	3 Φ
J3	2.9	3 Gallons	J32.9A	—	—	—	—	—	—	—	24	—	—	—	—	—	—
	5.7		J35.7A	—	—	—	—	—	—	—	48	—	—	—	—	—	—
	9.9		—	J39.9RS	J39.9R	—	—	—	—	—	—	48	28	—	—	—	—
	10.4		—	J310.4RS	J310.4R	—	—	—	—	—	—	50	29	—	—	—	—
	11.4		—	—	—	J311.4S	J311.4T	J311.4T4	—	J311.4T6	—	—	—	48	27	14	11
J4	11.3	4 Gallons	—	J411RS	J411R	—	—	—	—	—	—	54	31	—	—	—	—
	15		—	—	—	J411RS	J411R	J415T4	—	—	—	—	—	63	36	18	—
	27		—	—	J427R	—	J427T	J427T4	—	—	—	—	75	—	65	33	—
J6	1	6 Gallons	J61A	—	—	—	—	—	—	—	8	—	—	—	—	—	—
	1.5		J61.5A	—	—	—	—	—	—	—	13	—	—	—	—	—	—
	2		J62A	—	—	—	—	—	—	—	17	—	—	—	—	—	—
	3		J63A	—	—	—	—	—	—	—	25	—	—	—	—	—	—
	4		—	J64RS	—	J64S	—	—	J64T4S	—	—	19	—	17	—	—	—
	5		—	J65RS	—	J65S	—	—	J65T4S	—	—	24	—	21	—	—	—
	6		—	J66RS	J66R	J66S	J66T	J66T4	—	J66T6	—	29	17	25	14	7	6
	7		—	J67RS	J67R	J67S	J67T	J67T4	—	J67T6	—	34	19	29	17	8	7
	9		—	J69RS	J69R	J69S	J69T	J69T4	—	J69T6	—	43	25	38	22	11	9
	10.5		—	J610RS	J610R	J610S	J610T	J610T4	—	J610T6	—	50	29	44	25	13	10
	12		—	J612RS	J612R	J612S	J612T	J612T4	—	J612T6	—	58	33	50	29	14	12
	13.5		—	J613RS	J613R	J613S	J613T	J613T4	—	J613T6	—	65	38	56	33	16	13
	15		—	J615RS	J615R	J615S	J615T	J615T4	—	J615T6	—	72	42	63	36	18	14
	18		—	J618RS	J618R	J618S	J618T	J618T4	—	J618T6	—	87	50	75	43	22	17
	24		—	J624RS	J624R	J624S	J624T	J624T4	—	J624T6	—	115	67	100	58	29	23
	27		—	J627RS	J627R	J627S	J627T	J627T4	—	J627T6	—	130	75	113	65	33	26
	30		—	J630RS	J630R	J630S	J630T	J630T4	—	J630T6	—	144	83	125	72	36	29
	36		—	J636RS	J636R	J636S	J636T	J636T4	—	J636T6	—	173	100	150	87	43	35
	39		—	J639RS	J639R	J639S	J639T	J639T4	—	J639T6	—	188	108	163	94	47	38
	40.5		—	J640RS	J640R	J6040S	J640T	J640T6	—	J640T6	—	195	113	169	98	49	39
	45		—	—	J645R	J645S	J645T	J645T4	—	J645T6	—	—	125	188	108	54	43
	54		—	—	J654R	—	J654T	J654T4	—	J654T6	—	—	150	—	130	65	52
	58.5		—	—	J658R	—	J658T	J658T4	—	J658T6	—	—	163	—	141	70	56
J16	1	16 Gallons	J161A	—	—	—	—	—	—	—	8	—	—	—	—	—	—
	1.5		J161.5A	—	—	—	—	—	—	—	13	—	—	—	—	—	—
	2		J162A	—	—	—	—	—	—	—	17	—	—	—	—	—	—
	3		J163A	—	—	—	—	—	—	—	25	—	—	—	—	—	—
	4		—	J164RS	—	J164S	—	—	J164T4S	—	—	19	—	17	—	—	—
	5		—	J165RS	—	J165S	—	—	J165T4S	—	—	24	—	21	—	—	—
	6		—	J166RS	J166R	J166S	J166T	J166T4	—	J166T6	—	29	17	25	14	7	6
	7		—	J167RS	J167R	J167S	J167T	J167T4	—	J167T6	—	34	19	29	17	8	7
	9		—	J169RS	J169R	J169S	J169T	J169T4	—	J169T6	—	43	25	38	22	11	9
	10.5		—	J1610RS	J1610R	J1610S	J1610T	J1610T4	—	J1610T6	—	50	29	44	25	13	10
	12		—	J1612RS	J1612R	J1612S	J1612T	J1612T4	—	J1612T6	—	58	33	50	29	14	12
	13.5		—	J1613RS	J1613R	J1613S	J1613T	J1613T4	—	J1613T6	—	65	38	56	33	16	13
	15		—	J1615RS	J1615R	J1615S	J1615T	J1615T4	—	J1615T6	—	72	42	63	36	18	14
	18		—	J1618RS	J1618R	J1618S	J1618T	J1618T4	—	J1618T6	—	87	50	75	43	22	17
	24		—	J1624RS	J1624R	J1624S	J1624T	J1624T4	—	J1624T6	—	115	67	100	58	29	23
	27		—	J1627RS	J1627R	J1627S	J1627T	J1627T4	—	J1627T6	—	130	75	113	65	33	26
	30		—	J1630RS	J1630R	J1630S	J1630T	J1630T4	—	J1630T6	—	144	83	125	72	36	29
	36		—	J1636RS	J1636R	J1636S	J1636T	J1636T4	—	J1636T6	—	173	100	150	87	43	35
	39		—	J1639RS	J1639R	J1639S	J1639T	J1639T4	—	J1639T6	—	188	108	163	94	47	38
	40.5		—	J1640RS	J1640R	J1640S	J1640T	J1640T4	—	J1640T6	—	195	113	169	98	49	39
	45		—	—	J1645R	J1645S	J1645T	J1645T4	—	J1645T6	—	—	125	188	108	54	43
	54		—	—	J1654R	—	J1654T	J1654T4	—	J1654T6	—	—	150	—	130	65	52
	58.5		—	—	J1658R	—	J1658T	J1658T4	—	J1658T6	—	—	163	—	141	70	56
J16 with 1-1/2" inlet outlet	64	16 Gallons	—	—	J1664R	—	—	—	—	—	—	—	178	—	—	—	—
	68		—	—	—	—	J1668T	J1668T4	—	J1668T6	—	—	—	—	164	82	66
	81		—	—	J1681R	—	J1681T	J1681T4	—	—	—	—	225	—	195	98	—
	86		—	—	J1686R	—	—	—	—	J1686T6	—	—	239	—	—	—	83
	88		—	—	—	—	J1688T	J1688T4	—	—	—	—	—	—	212	106	—

Notes:

1. The 6, 7, and 9KW models in 208 and 240 volt can be field converted from either 1 phase to 3 phase or from 3 phase to 1 phase
2. All 3 phase units are factory wired as a balanced 3 phase unit.
3. Models are also available in 380, 415, 440 and 575 volt. Please consult factory for exact KW selection in these voltages.

Recovery Ratings 1-58.5 kW								
KW Rating	Recovery Rate in GPH at °F Temperature Rise (ΔT)							
	20° ΔT	30° ΔT	40° ΔT	60° ΔT	70° ΔT	80° ΔT	110° ΔT	140° ΔT
1	20	14	10	7	6	5	4	3
1.5	31	20	15	10	9	8	6	4
2	41	27	20	14	12	10	7	6
3	61	41	31	20	18	15	11	9
4	82	55	41	27	23	20	15	12
5	102	68	51	34	29	26	19	15
6	123	82	61	41	35	31	22	18
7	143	96	72	48	41	36	26	20
9	184	123	92	61	53	46	33	26
10.5	215	143	107	72	61	54	39	31
12	246	164	123	82	70	61	45	35
13.5	276	184	138	92	79	69	50	39
15	307	205	154	102	88	77	56	44
18	368	246	184	123	105	92	67	53
24	491	328	246	164	140	123	89	70
27	553	368	276	184	158	138	100	79
30	614	409	307	205	175	154	112	88
36	737	491	368	246	211	184	134	105
39	798	532	399	266	228	200	145	114
40.5	829	553	415	276	237	207	151	118
45	921	614	461	307	263	230	167	132
54	1105	737	553	368	316	276	201	158
58.5	1198	798	599	399	342	299	218	171

Recovery Ratings 64-88 kW								
64	1310	873	655	437	374	328	238	187
68	1392	928	696	464	398	348	253	199
81	1658	1105	829	553	474	415	301	237
86	1761	1174	880	587	503	440	320	252
88	1802	1201	901	601	515	450	328	257

Formulas To Solve For:

Recovery

GPH x _____ °F ΔT x 0.00244 = KW

KW x 410 ÷ GPH = _____ °F ΔT

KW x 410 ÷ _____ °F ΔT = GPH

Note: 1 KW will heat 4.1 GPH at a 100°F ΔT

Electrical

$\frac{\text{KW x 1000}}{\text{Volts}}$ ÷ 1.73 = Amps 3 Phase

$\frac{\text{KW x 1000}}{\text{Volts}}$ = Amps 1 Phase

Metric Conversion

Liters x 0.2641 = Gallons
Gallons x 3.79 = Liters
Gallons x 0.003785 = m^3
m^3 x 264.2 = Gallons
1°F ΔT = 1.8°F ΔT

°F = (°C x 1.8) + 32
°C = (°F - 32) x 0.556
psi x 0.06896 = Bar
Bar x 14.5 = psi
psi x 6.86 = kPa

kPa x 0.1456 = psi
Lbs x 0.4536 = Kg
Kg x 2.2 = Lbs
Watts/Sq.Cm. x 6.4 = Watts/Sq.In.
Watts/Sq.In. x 0.155 = Watts/Sq.Cm.

Voltage De-Rating Factors

Rated Voltage	Applied Voltage	KW De-Rating Factor
600	575	92%
600	550	84%
480	460	92%
480	440	84%
240	230	92%
240	220	84%

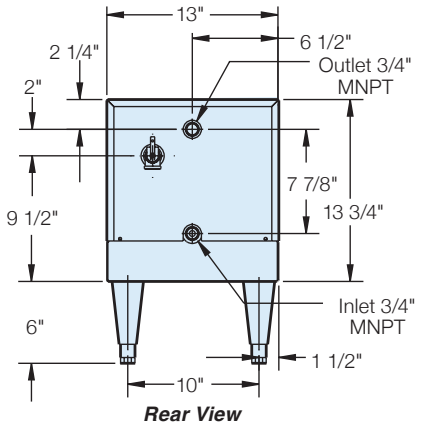
When the actual supply voltage (applied voltage) is different than the booster design voltage (rate voltage) the resulting KW output will be affected. Please see the chart for typical voltage de-rating factors, or use the following formula:

$\frac{\text{Applied Votage}^2}{\text{Rated Voltage}^2}$ x Rated KW = KW output at applied voltage

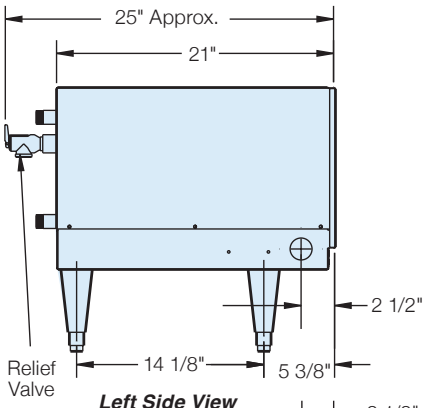
Hubbell™

Model J6 - (1 to 18kW) Dimensions

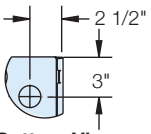
Shipping Weight: 95 lbs.



Rear View



Left Side View

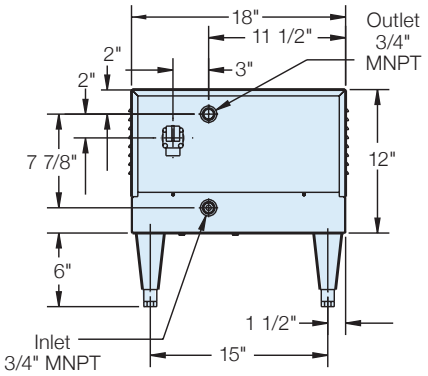


Bottom View

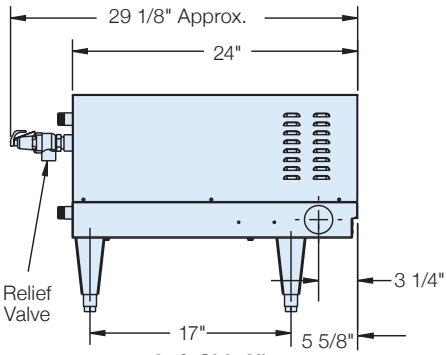
Knockouts: Left Side And Bottom
3/4" X 1" X 1-1/4"

Model J6 - (24 to 58.5kW) Dimensions

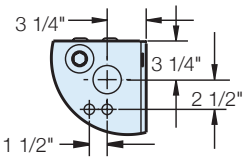
Shipping Weight: 110 lbs.



Rear View



Left Side View

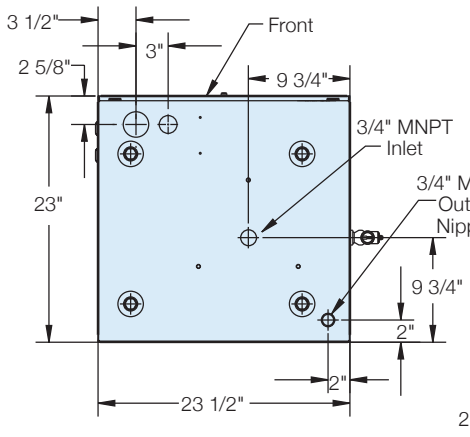


Bottom View

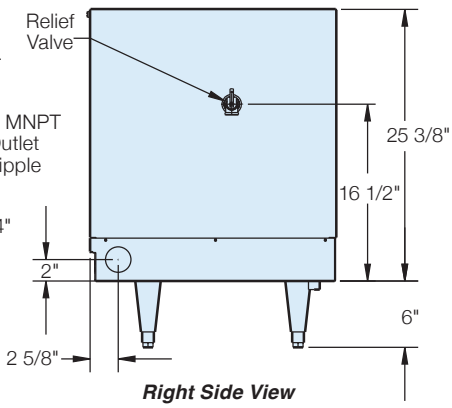
Knockouts: Left Side - (1) 1-1/2" X 2"
Bottom - (2) 1/2" and (1) 1-1/2" x 2"

Model J16 - (1 to 58.5kW) Dimensions

Shipping Weight: 160 lbs.



Bottom View

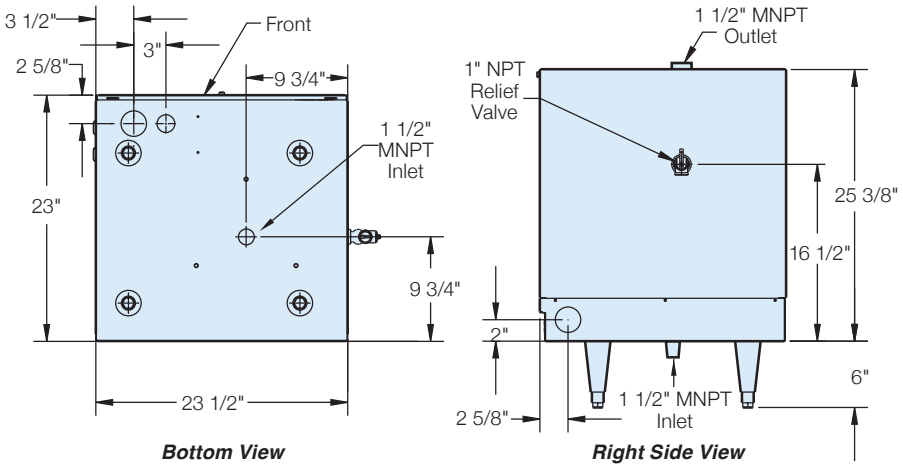


Right Side View

Knockouts: Left Side - 1-1/2" X 2"
Bottom - 1-1/2" X 2" and 3/4" X 1" X 1-1/4"

Model J16 - (64 to 88 kW) Dimensions

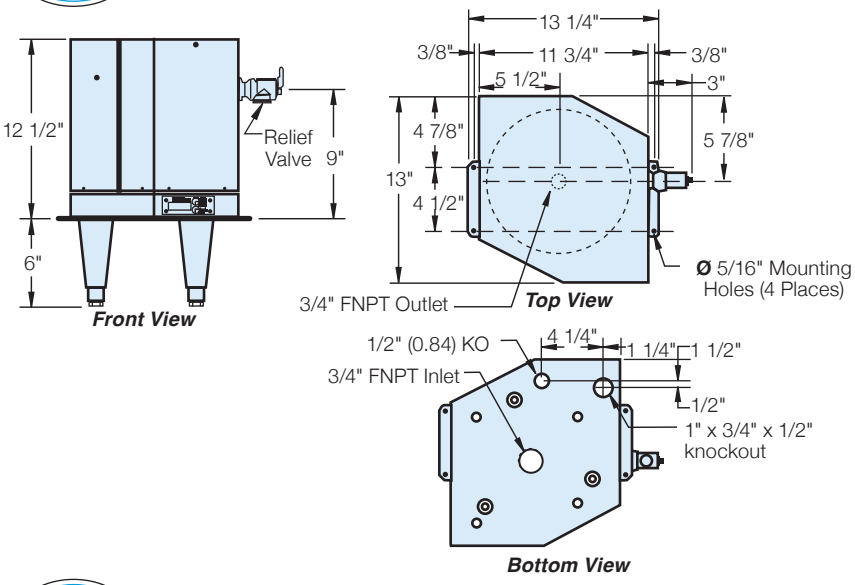
Shipping Weight: 195 lbs.



Knockouts: Left Side - 1-1/2" X 2"
Bottom - 1-1/2" X 2" and 3/4" X 1" X 1-1/4"

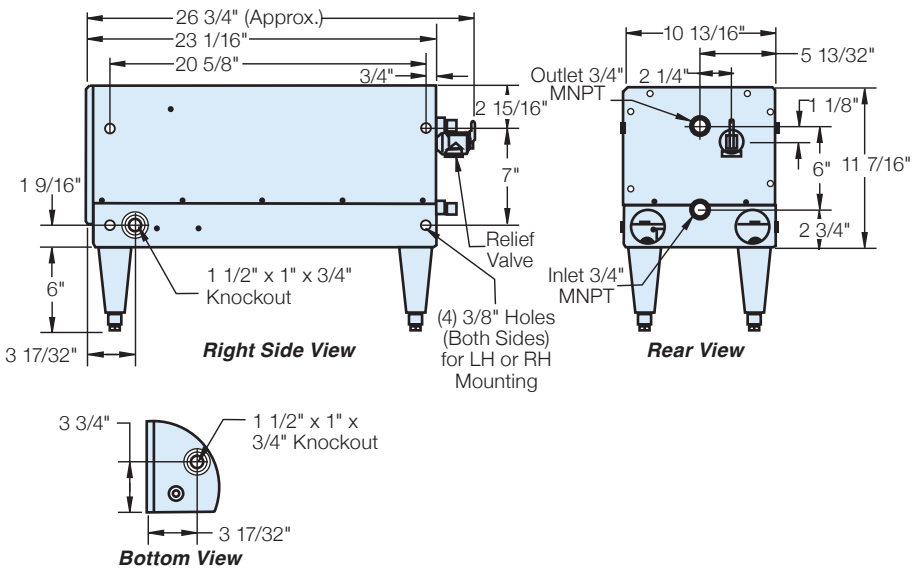
Model J3 - (2.9 to 11.4 kW) Dimensions

Shipping Weight: 46 lbs.
Note: Shown with optional legs



Model J4 - (11.3 to 27 kW) Dimensions

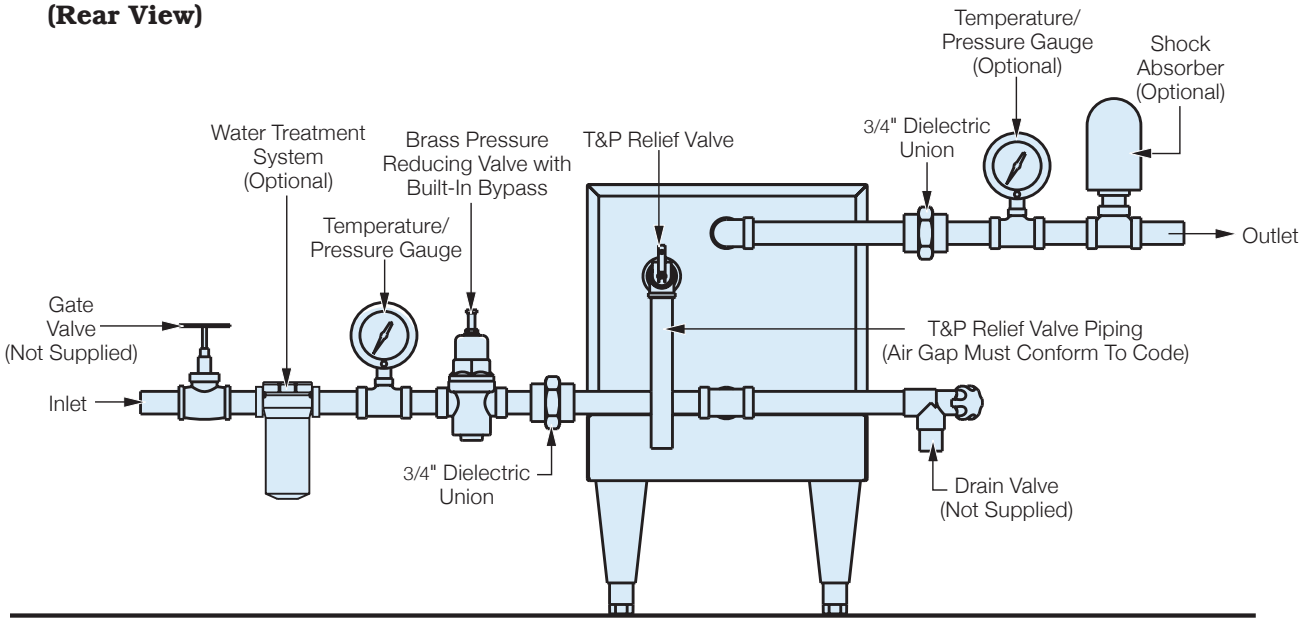
Shipping Weight: 80 lbs.
Note: Shown with optional legs



Typical Installation Diagrams

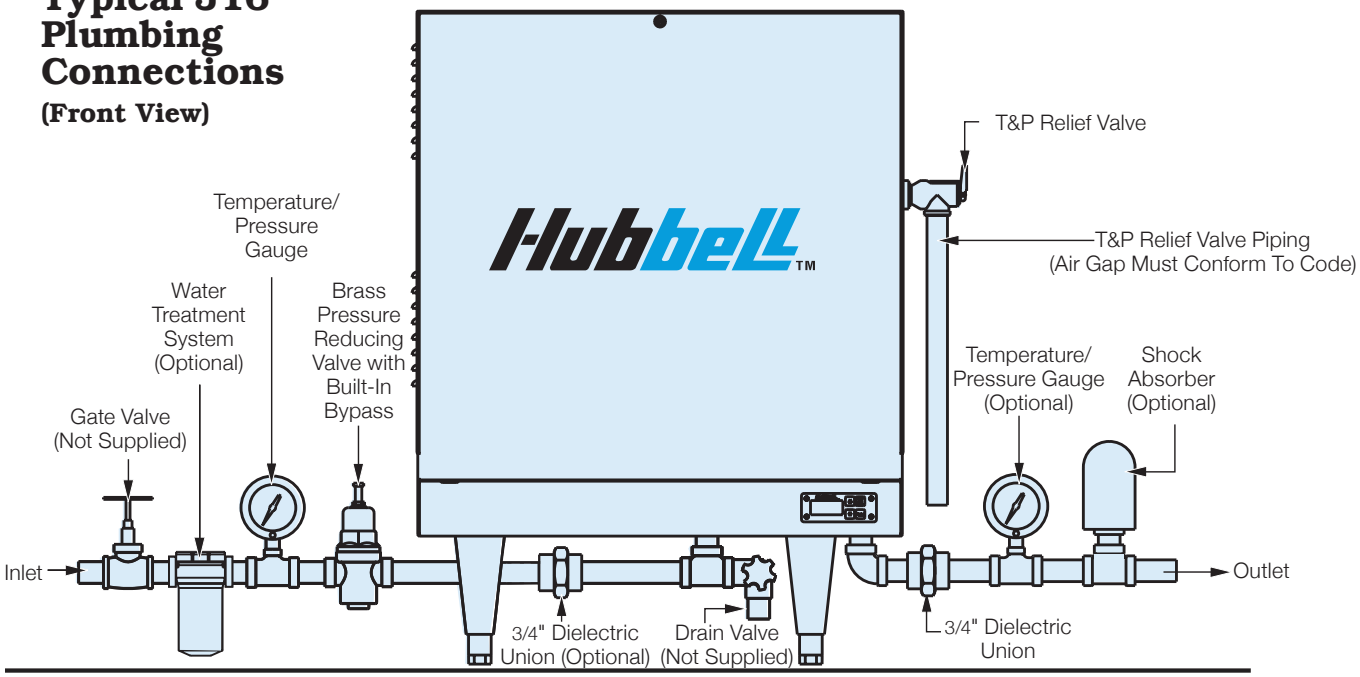
Typical J6 Plumbing Connections

(Rear View)



Typical J16 Plumbing Connections

(Front View)



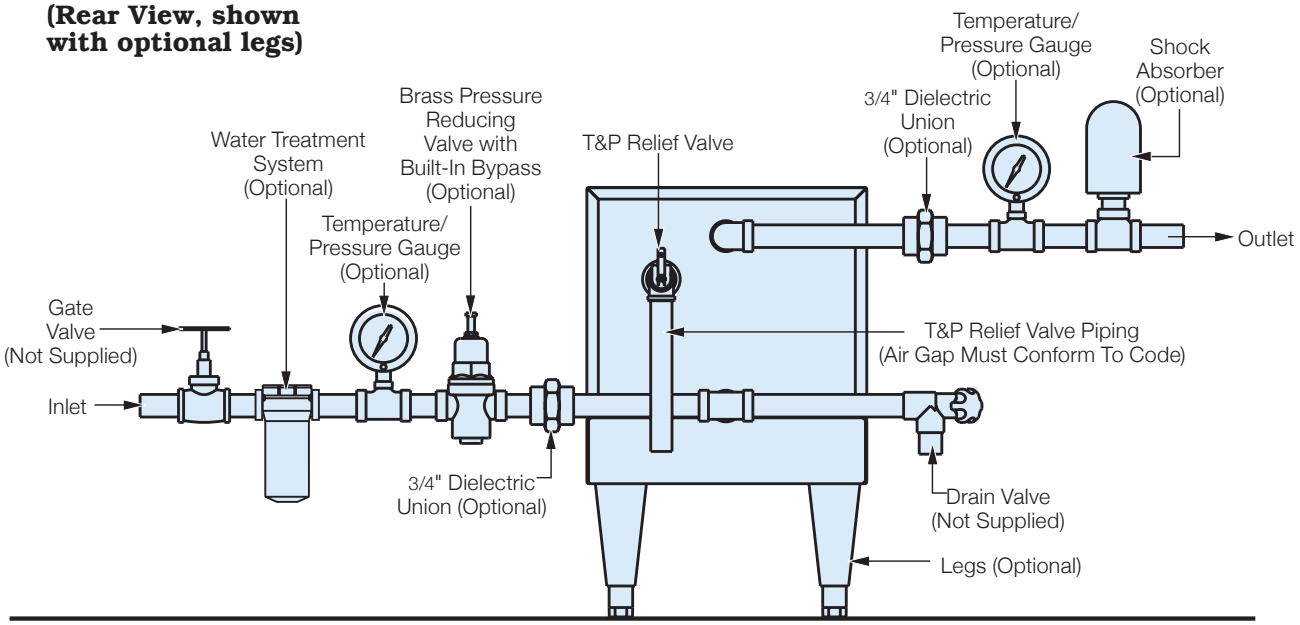
Plumbing Notes:

1. Dielectric unions as supplied must be installed in the inlet and outlet piping to prevent electrolysis.
2. No check valve may be installed in the supply line to the booster.
3. All shut off valves must be gate or ball valves - not globe valves.
4. The brass pressure reducing valve with built-in bypass is adjustable from 25 to 75 psi.
5. To minimize heat loss and maximize efficiency, hot water piping should be insulated.

Typical Installation Diagrams

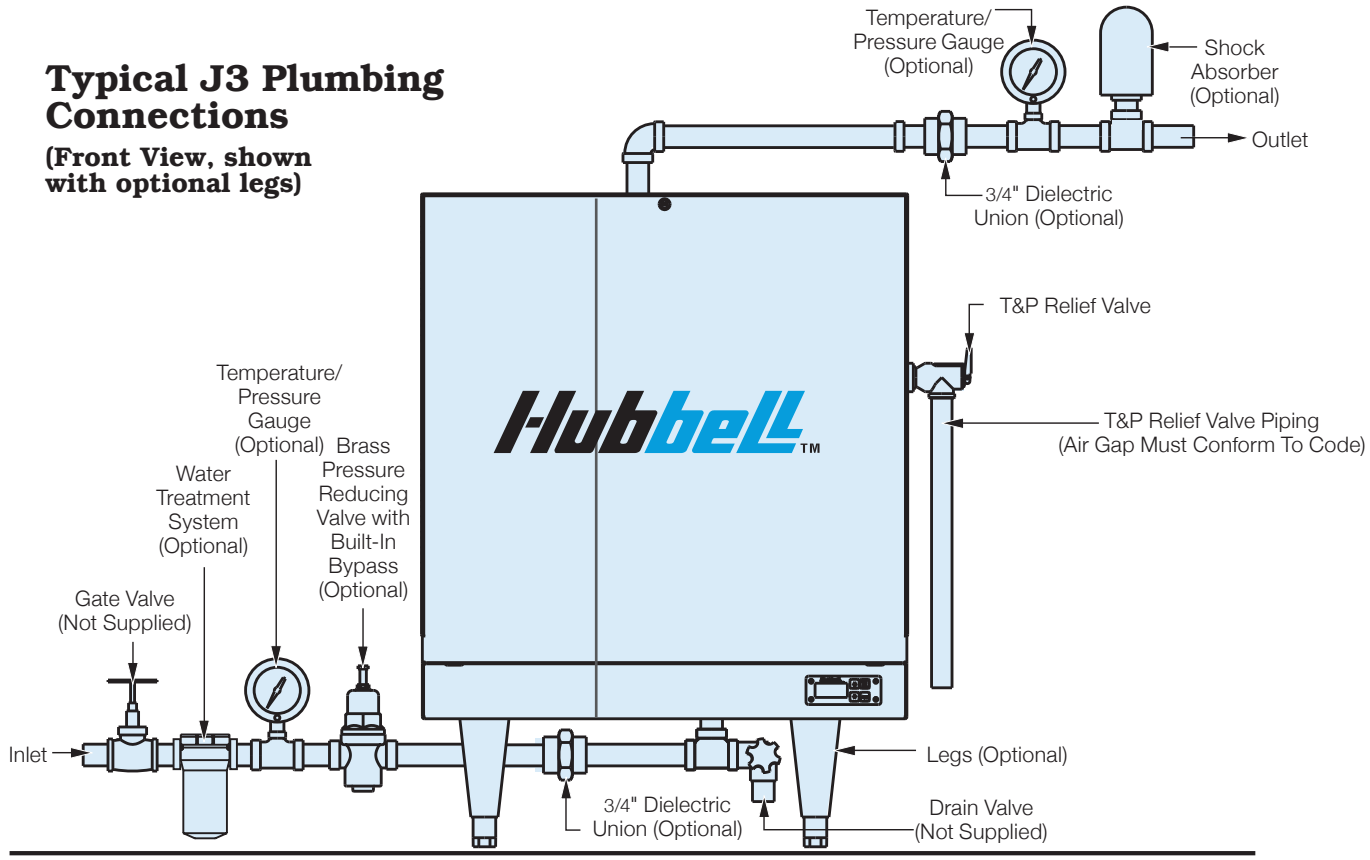
Typical J4 Plumbing Connections

(Rear View, shown with optional legs)



Typical J3 Plumbing Connections

(Front View, shown with optional legs)



Plumbing Notes:

1. Dielectric unions are recommended for installation in the inlet and outlet piping to prevent electrolysis.
2. No check valve may be installed in the supply line to the booster.
3. All shut off valves must be gate or ball valves - not globe valves.
4. The brass pressure reducing valve with built-in bypass is adjustable from 25 to 75 psi.
5. To minimize heat loss and maximize efficiency, hot water piping should be insulated.

J Model Standard Accessories

J6 and J16 Boosters

- √ T&P Relief Valve
- √ Brass pressure reducing valve with built-in bypass
- √ (4) NSF approved plastic legs
- √ (1) Combination temperature and pressure gauge
- √ (2) Dielectric Unions

J4 Boosters

- √ T&P Relief Valve
- √ Side mounting bracket for securing booster to left or right hand side of dish machine

J3 Boosters

- √ T&P Relief Valve
- √ 24 volt booster heater interlock adapter

Note: Any and all optional accessories for a Hubbell booster heater must be called out in the written specifications. A model number in and of itself does not reflect any optional accessoties selected.

Optional Accessories

☐ **1. Slide Brackets:** Available for the J6 model only, these brackets allow for mounting the booster heater under a counter. See slide bracket diagram for details.

☐ **2. Shock Absorber:** Reduce the harmful pressures resulting from quick closing dishwasher solenoid valves by installing a shock absorber between the booster and the dishwasher.

☐ **3. Tamper Resistant Package:** For prison and other secure facilities a tamper resistant package is available with all hardware tamper resistant type. Includes standard plastic legs unless otherwise specified.

☐ **4. Protective Cover:** Keep your Hubbell booster free from dirt, debris, chemicals and excessive water with this removable form fitted protective cover. Velcro fasteners make it easily installed and simple to remove when service is required. Clear window allows visibility of Hubbell booster digital display.

☐ **5. Alternate Legs:** Please specify type: Nickel plated die cast, stainless steel, stainless steel with flanged base for floor mounting.

☐ **6. 24 Volt Heater Interlock Adapter:** An optional plug adapter that interlocks the heater via a 24-Volt signal through the J1 connector on the control board (standard on the J3).

☐ **7. Water Treatment System:** Provide superior mineral scale prevention and corrosion control by feeding a special blend of scale control compounds into the hot water stream before the booster. The in-line system to include a clear cartridge housing to allow an operator to view the cartridge and determine when it needs replacement without the need to open the system.

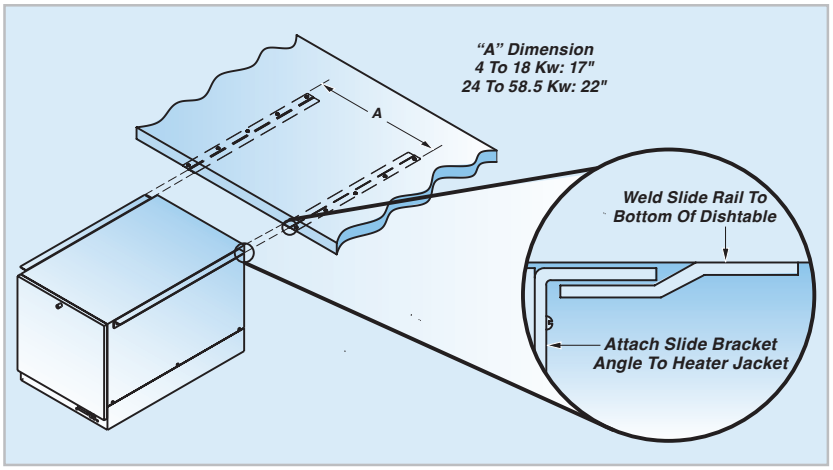
☐ **8. Alternative Voltages:** Hubbell booster heaters are available in alternate voltages including 380, 415, 440 and 575 volt. Please contact factory for kW selection.

☐ **9. Low Temperature Interlock:** This device is built into the booster and monitors water temperature and will trip an SPDT relay when water temperature drops below a set point (150 - 180°F) thereby preventing final rinse from activating.

☐ **10. Remote Alarm Adapter:** This device installs into the Hubbell controller and provides remote alarm capability to indicate a reset fault condition. Common/N.O./N.C. rated 220 VDC, 250 VAC, 2 amp max.

☐ **11. Remote Control Panel:** This device allows you to install the booster in one location and have complete control of it (on/off, temperature adjustment, reset and temperature indication) from another location (200 feet maximum). Remote control panel is 5" x 2" x 3" and NEMA 4 rated.

J6 Slide Bracket Detail


"A" Dimension
4 To 18 Kw: 17"
24 To 58.5 Kw: 22"
A
Weld Slide Rail To Bottom Of Dishtable
Attach Slide Bracket Angle To Heater Jacket

Water Quality Requirements

Recommended water hardness is 4 to 6 grains of hardness per gallon (GPG). Water hardness above 6 GPG should be treated by a water conditioner (water softener or in-line treatment). Water hardness below 4 GPG also requires treatment to reduce potential corrosion. Excessive GPG will result in higher operating and maintenance costs and will reduce product longevity.

Chlorides must not exceed 50 parts per million (ppm). Excessive chlorides will result in metallic corrosion and will reduce product longevity.

Water treatment has been shown to reduce costs associated with deliming the booster as well as reducing metallic corrosion. Product failure caused by these conditions is not covered under warranty. See warranty for complete details.

Booster Sizing for a Low Temp Dishmachine

Chemical low-temp dishwashers are most effective when supplied with 140°F hot water. This water temperature may not be available due to an undersized primary water heater or local safety code. Hubbell J model boosters can operate as a pre-heater for chemical low-temp dishwashers to provide an adequate supply of 140°F hot water for proper operation. For temperatures other than the factory setting of 185°F, simply set the digital display to your desired temperature.

To properly size a Hubbell booster heater for low temp use:

1. Determine the required temperature rise; the difference in temperature between your supply water temperature to your booster and your desired hot water temperature out of the booster.
2. Determine the water usage gallons per hour (GPH) by consulting the dishwasher data plate, literature or NSF listing.
3. Select the appropriate kW based on 1 and 2 above using either the formula below or the Recovery Rating Chart on page 4.

Booster Sizing Formula

Required Variables:

A. Water usage in GPH _____

B. Supply water temp in °F _____

C. Desired water temp in °F _____

D. Calculate the ΔT (temp rise) by subtracting **C** - **B** in °F _____

Formula to Determine KW:

_____ GPH x _____ °F ΔT x 0.00244 = _____ KW

Booster Heater Dishwasher Sizing Chart

Dishwasher Model Number	40 °F Rise 6 Gallon Model J6	40 °F Rise 16 Gallon Model J16	70 °F Rise 6 Gallon Model J6	70 °F Rise 16 Gallon Model J16
ADAMATION				
CSL-1390, CA-2, CA-3, CA-4, SLAP 44	J639	J1639	(2) J636	(2) J1636
CA, CA-1	J654	J1654	(2) J645	(2) J1645
ALVEY				
FLC-10, SL-2S		J166		J169
FLC-12, CL-1, CL-1Turntable, SA-5A		J167		J1612
FL-2S		J169		J1613
KS-70, KS70M SB		J169		J1615
SL-2D		J1613		J1618
FLC-36		J1615		J1627
KS-88		J1618		J1630
KS-70-N, KS-88-N		J1639		
AMERICAN DISH SERVICE				
HT-25	J67	J167	J612	J1612
ACD-44, ADC-66	J612	J1612	J624	J1624
BLAKESLEE				
UC-21	J66	J166	J612	J1612
D-8	J69	J169	J613	J1613
Series "R" & " F" -CC, -EE, -LL, -MM, -LLL, -MMM, -PCC, -PEE, -PLL, -PMM	J613	J1613	J624	J1624
Series XF-LL, XF-PLL, XF-MM, XF-PMM, XF-EEE, XF-LLL, XF-MMM	J618	J1618	J630	J1630
DD-8	J618	J1618	J630	J1630
Series R-L, R-PL, R-M, R-PM, F-L, F-PL, F-M, F-PM (single tank)	J636	J1636	J654	J1654
Series XF-L, XF-PL, XF-M, XF-PM,	(2) J636	(2) J1636		
Series XF-PEE, XF-PLL, XF-PMM, XF-EEE, XF-LLL, XF-MMM (multi tank)	J645	J1645	(2) J630	(2) J1630
NOTE: FA (Flight-A-Round) and RA (Rack-A-Round) use comparable "F" listing.				
CHAMPION				
U-H1, UH-200, UH-200B, U-HB	J64	J166	J66	J166
UL-150	J64	J166	J67	J167
UH-150, UH-150B, UH-100, UH-100B, DHB-VS	J65	J166	J69	J169
D-H1, D-HB	J66	J166	J612	J1612
D-H1T, D-HBT	J67	J167	J612	J1612
PP-28	J69	J169	J615	J1615
D-H1C, D-H1TC	J69	J169	J618	J1618
66 WSPW, 44-WS, 66-WS	J613	J1613	J624	J1624
UC-CW6-WS	J624	J1624	J636	J1636
US-CW8-WS	J624	J1624	J639	J1639
44, 66 PW, 70FFPW, 80HDPW, 54, 76PW, 80FFPW, 90HDPW, 64, 90FFPW, 100HDPW, 86PW	J624	J1624	J645	J1645
40-KB, 44-KB-2-2, 40-KFWB, 40-KPRB, 40-KPRB-2-2, 40PRB-2-3, 60-KB, 60-KB-2-2, 60-KFWB, 60-KFWB-2-2, 60-KPRB, 60-KPRB-2-3, 64KB, 64-KB Corner, 64-KPRB Corner, 64-KPRB, 64-KPRB Corner, 64 Modular, 86 Modular	J630	J1630	J654	J1654
44-KB, 44-KB Corner, 44-KPRB, 44-KPRB Corner, 54-KB, 54-KB Corner, 54-KPRB, 54-KPRB Corner, 44 Modular, 66 PW Modular	J636	J1636	J658	J1658
UC-CW4	J636	J1636	(2) J636	(2) J1636
UC-C	J645	J1645	(2) J636	(2) J1636
UC** Series 6' Center	J645	J1645	(2) J639	(2) J1639
W-6-WS	J645	J1645	(2) J645	(2) J1640
CMA DISH MACHINES				
CMA-180	J67	J167	J612	J1612
CMA-44H with tank heater, CMA-66H	J636	J1636	J645	J1645
HOBART				
AM-15F	J64	J166	J66	J166
LXiC, LXiGC, LX-18C, LX-30C, LX-40C	J64	J166	J67	J166
LX-30, SR24, SR24H	J64	J166	J67	J167
LX-18	J65	J166	J69	J169
AM-15, AM-15T	J65	J166	J69	J169
WM-5C	J66	J166	J69	J169
WM-5 (Without Sump Heater)	J67	J167	J612	J1612
AM-14T, AM-14F, AM-14TC	J67	J167	J612	J1612
AM-14, AM-14C	J69	J169	J612	J1612
AM-12, AM-12C*	J69	J169	J618	J1618
UW-50		J1615		J1624
Opti-Rinse Models: C44A, CRS-66A, CCS-66A, CPW-80A, C54A, CRS-76A, CCS-76A, CPW-90A, C64A, CRS-86A, CCS-86A, CPW-100A, C88A, CRS-110A, CCS-110A, CPW-124A	J615	J1615	J627	J1627
C-54A, CRS-76A, CPW-90A, CCS-76A	J639	J1639	(2) J636	(2) J1636
C-44A, CRS-66A, CCS-66A, CPW-80A, C-64A, CRS-86A, CCS-86A CPW-100A	J630	J1630	J654	J1654
C-88A, CRS-110A, CPW-124A, CCS-110A	J636	J1636	J654	J1654
Opti-Rinse Models: C44AW, CRS-66AW, CCS-66AW, CPW-80AW	J69	J169	J615	J1615
C-44AW, CRS-66AW, CPW-80AW, CCS-66AW	J612	J1612	J624	J1624
C-44, CRS-66, CPW-80	J636	J1636	J654	J1654
C-54, CRS-76, CPW-90	J654	J1654	(2) J639	(2) J1639
C-64W, CRS-86W, CPW-100W, C-88W, CRS-110W, CPW-124W, CCS-86W	J624	J1624	J636	J1636
C-64, CRS-86, CPW-100	J645	J1645	(2) J636	(2) J1636
FT800W, FT-900W	J624	J1624	J639	J1639
FT-600, FT-700	J654	J1654	(2) J639	(2) J1639
FT800	J639	J1639	(2) J639	(2) J1639
FT-900	J636	J1636	J658	J1658
FT800S, FT-900S	J639	J1639	(2) J636	(2) J1636
Opti-Rinse Models: FT900-10-FPM, FT900-12-FPM, FT900-6-HTS	J624	J1624	J639	J1639
Opti-Rinse Models: FT900S	J624	J1624	J624	J1624
UTW-28, UTW-28C		J1618		J1636

NOTE 1. FRC and FR (Fast Rack Series) use comparable "C" line listing.
NOTE 2. Model AM-12 with serial no. 12-067-357 or below and model AM-12C with serial no. 12-067-537 or below require slightly larger booster heater than listed.
NOTE 3. C models with serial no. 85-1041605 or greater use Opti-Rinse

Dishwasher Model Number	40 °F Rise 6 Gallon Model J6	40 °F Rise 16 Gallon Model J16	70 °F Rise 6 Gallon Model J6	70 °F Rise 16 Gallon Model J16
INSINGER				
Commander 18-5, 18-5H, Ensign 40-2	J66	J166	J612	J1612
Admiral 44-4, 66-4	J624	J1624	J636	J1639
Speeder 64, 86-3, Century (all)	J624	J1624	J645	J1645
Trac 321, Trac 321-2/RPW	J627	J1627	J645	J1645
Trac 878	J624	J1624	J636	J1636
Clipper (all), R106-2, Super 106-2	J627	J1627	J645	J1645
Defender	J636	J1636	J654	J1654
Master (all)	J636	J1636	J658	J1658
CA-3		J169		J1624
DA-3		(2) J169		(2) J1624
JACKSON				
JPX-140, JPX-160, JPX-200, JPX-200/2, TSC-44, TSC-66	J64	J166	J64	J166
H-24, HZ-24, JP-24, JPX-300H, JPX-300HN, JPX-300N, M-24BF	J64	J166	J65	J166
JP-24B, JP-24F, JP-24BF	J64	J166	J66	J166
24B Series			J64	J166
10AB, 10APRB			J65	J166
200, Huey 165, Supra-Q2020	J66	J166	J69	J169
100B, 100PRB, 150B, 150PRB			J69	J169
Tempstar SDS	J66	J166	J612	J1612
10A, 10APRB, 10APRB-M, 10U, 300X, 300XN, ES-18, ES-18HT, E-xxion, TS-57, Tempstar, Tempstar 300N, Tempstar 300X, Tempstar 300XG, Tempstar GPX	J66	J166	J612	J1612
Inferno, Omega HT	J67	J167	J612	J1612
PH-HT, Performer, TempStar HH, TempStar HH/GPX, TempStar HH/S	J67	J167	J613	J1613
200B			J66	J166
100	J612	J1612	J624	J1624
150	J612	J1612	J618	J1618
TS-44, TS-66	J624	J1624	J636	J1636
AJ-64, AJ-86, AJ-100, JFT, JFT Flight Type, JFT-G, JFT-S	J624	J1624	J639	J1639
ES-8000, PA-C4, WH-44, WH 66	J624	J1624	J645	J1640
64CE, 86 CERPW	J627	J1627	J639	J1639
AJ-54, AJ-76, AJ-90	J630	J1630	J654	J1654
44CE*, 66 CERPW	J630	J1630	J654	J1654
54CE, 76 CERPW	J636	J1636	(2) J630	(2) J1630
AJ-44, AJ-66, AJ-80, ES-4400, ES-6600 (ECOLAB/JACKSON)	J624	J1624	J645	J1645
NOTE 1: Model 44CE with serial no.1999 or below requires larger booster than listed.				
KNIGHT EQUIPMENT				
KLE-112-HL	J67	J167	J612	J1612
MEIKO				
K-44, K-66, K-80	J624	J1624	J636	J1636
K-54, K-76, K-90, K-64, K-86, K-100	J624	J1624	J645	J1645
METALWASH/INTEDGE				
FW4	J612	J1612	J618	J1618
RS-30A, RS-28L		J1615		J1624
RT-74, RT-60, RT-42B, RT-42BC		J1627		J1640
RS-2R		J1630		J1645
STERO				
SCT-44-10-LW, SCT-44-LW, SCT-66S-LW, SCT-76S-LW, SCT-76SC-LW, SCT-90S-LW	J612	J1612	J624	J1624
SC-1-2-4-LW, SC-1-6-4-LW, SC-1-6-4-LW, SC-2-4-LW, SC-5-6-4-LW, SC-6-4-LW	J624	J1624	J645	J1645
SCT-64, SCT-86S, SCT-94S, SCT-94SC	J624	J1624	J639	J1639
SCT-108S, SCT-108SC, SCT-76, SCT-94SM	J627	J1627	J654	J1654
SC-6-4, SCT-44, SCT-44-10, SCT-44-10, SCT-66S, SCT-76S, SCT-90S	J630	J1630	J654	J1654
SCT-120S, SCT-120SC, SCT-120SM, SCT-150SM	J636	J1636	J658	J1658
STW-110, SC-1-2-7-4, SC-1-6-3-4, SC-1-6-7-4, SC-2-7-4, SC-5-2-7-4, SC-5-6-3-4, SC-5-6-7-4, SC-6-3-4, SC-6-7-4	J639	J1639	(2) J636	(2) J1639
SC-1-2-4, SC-1-6-4, SC 2-4, SC-5-2-4, SC-5-6-4	J645	J1645	(2) J636	(2) J1645
SCT-44-10-SC-1-3-4, SCT-44-10-3-4, SCT-44-SC-1-3-4, SCT-44-SC-3-4, SCT-54-SC-1-3-4, SCT-54-SC-3-4, SCT-76S-SC-3-4	J645	J1640	(2) J636	(2) J1636
STPC (Four Tank)	J624	J1624	J639	J1639
STPCW (Four Tank)	J624	J1624	J645	J1640
STPC	J627	J1627	J654	J1654
STPCW	J636	J1636	(2) J630	(2) J1630
SCBT	J645	J1640	(2) J636	(2) J1636
SF-1RA, SC20-1	J67	J167	J612	J1612
SF-2RA, SF-2DRA, SD-2RA, SDRA, SDRA-PACK	J612	J1612	J618	J1618
SCT-54, SCT-76SM	J636	J1636	J658	J1658
SCT-76, SCT-80, SCT-94, SCT-108, SCT-120	J645	J1645	J658	J1658
U-31-A, U-31-AC		J1618		J1636
U-31-A2	J645	J1645	(2) J636	(2) J1636
STBUW-14	J658	J1658	(2) J654	(2) J1654
SC-2-3-4, SC-5-2-3-4	J630	J1630	(2) J627	(2) J1627
SC20-2	J612	J1612	J624	J1624
SC-2-8, SC-2-9, SC-1-2-8, SC-5-6-8, SC-6-8, SC-6-9, SC-1-6-8, SC-5-6-9, SC-5-2-9, SC-1-6-9, SC-5-2-8	J618	J1618	J636	J1636

This selector chart is based upon 40 degree F and 70 degree F temperature rises, 20psi flow pressure and minimum rinse cycle timer setting in NSF listing.

All booster heaters are rated at 100% of the capacity of the dishwasher as recommended by the National Sanitation Foundation. Where make-up water for the wash tank is provided from the final rinse supply, chart recommendations are based upon this additional demand (not exceeding 2 GPM) as required by NSF.

Master Specification: Model J

JOB NAME _____ CONSULTANT / SPECIFIER _____

REPRESENTATIVE _____ DEALER / SERVICE AGENT _____

Provide a quantity of _____ electric booster water heater(s) Model No. _____ as manufactured by Hubbell. The pressure vessel shall be all stainless steel welded construction and shall bear the ASME Section VIII stamp. The tank shall be insulated with CFC/HCFC free high efficiency closed cell foam insulation to reduce standby heat loss. To minimize operating expenses, heat loss shall not exceed 425 btu/hr.

The booster shall be listed and approved in accordance with UL Sanitation (NSF5) and UL1453. All controls shall be built-in and factory wired. The booster shall include internal resettable circuit breakers in lieu of one-shot power fuses for over current protection when required. The immersion heating elements shall be high quality screw plug type with O-ring gasket to ensure leak free long life service. All temperature, hi-limit, and low water operating functions shall be controlled by an electronic digital display solid state device that shall provide the operator with visual indication of temperature setting and fault conditions. For ease of service for any replaceable component, the positioning of all components shall be such that to remove any component does not require the removal of another component.

The entire exterior of the booster heater including the base, jacket and front cover shall be brushed stainless steel for maximum corrosion resistance, longevity and appearance.

The booster heater shall include an ASME/CSA rated combination temperature and pressure relief valve, 6" adjustable NSF plastic legs (Optional Specification: slide brackets on J6 model only), bronze body pressure reducing valve with built-in bypass, and one indicating temperature and pressure gauge.

The entire pressure vessel shall be provided with a full ten (10) year **Non Pro-Rated** tank warranty. The entire booster heater including all components shall be provided with a one-year warranty including parts and labor.

Sales and Service Network

An extensive network of authorized Hubbell Service Agents, Dealers, and Sales Representatives stand ready to support the needs of the Food Service Industry and to ensure that Hubbell Customers are provided with the highest quality in customer case and service.

Access Hubbell's website for a complete listing of authorized Hubbell Service Agents, Dealers, and Sales Representatives.

Complete Inventory Ready to Ship

Hubbell is committed to serving the needs of the Food Service Industry, including having the complete line of Hubbell booster heaters ready to ship the same day when an order is received by the factory by 12:00pm eastern time. Hubbell's investment in a state-of-the-art production facility and an extensive on-hand inventory ensures that our Food Service Customer's needs are met in a timely fashion.

AutoQuotes NAFEM North American Association of Food Equipment Manufacturers CFESA em web Electronic Manual MAFSI

ISO 9001:2008

Committed to continuous improvement...

Continuing research results in product improvement; therefore specifications are subject to change without notice. For the most updated information, consult the factory directly.

Made in the U.S.A.

Hubbell™ *The Electric Heater Company* ■ P.O. Box 288 ■ Stratford, CT 06615-0288 ■ Phone: 203-378-2659 ■ Fax: 203-378-3593
info@hubbellheaters.com ■ ***www.hubbellheaters.com***